

CURRENT LINE

DAR STATEWIDE PROJECT INFORMATION NEWSLETTER

VOLUME 5, NUMBER 1, March 2001

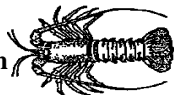
LICENSES, RULES & REGULATIONS

REMINDERS



Mullet Season (for 'ama'ama or striped mullet) is now **OPEN** as of March 1st and will remain OPEN till November 30th.

Spiny Lobster Season Slipper Lobster Season & Kona Crab Season



is still **open** and will remain OPEN till April 31st. Remember that minimum size for home consumption or sale is as follows:

	Home Consumption	Commercial Sale
Spiny Lobsters	3-1/4 inches carapace length	3-1/4 inches carapace length
Slipper Lobsters	2-3/4 inches tail width	2-3/4 inches tail width
Kona Crab	no restriction	4 inches long or wide

Other restrictions include no spearing, no taking with eggs, animals must be taken whole only and cannot be taken mutilated.

Moi & Moi-li'i Season

is still **open** and will remain OPEN till May 31st. Remember that minimum size for home consumption or sale is 7 inches.

Waikiki Diamond Head Fishery Management Area will be **closed** to fishing from January 1, 2001 to December 31, 2001. The area will be open to fishing from January 1, 2002 to December 31, 2002.

INSHORE PROJECTS

ULUA TAGGING PROJECT YEAR 2000 UPDATE



Good job everybody! Thanks to Hawaii's ulua and papio fishers, DAR's Statewide Ulua Tagging Project got off to a great start in 2000! Mahalo to those of you who answered and sent back our survey along with some current tagging data. The following gives a general summary for some tagging project data highlights as of 2/19/01:

Tagged and Released Fish

Species	Number of Fish Tagged	Size Ranges of Fish Tagged (inches in fork length)	Number of Recoveries
Kahala	580	10.5 to 52	21
White Ul原因/Papio	19	8 to 47	3
Omilu	65	7 to 28.5	4
Butaguchi	25	20 to 36.5	-
Papa	5	10.5 to 26.5	-
Gungkan (black ulua)	1	28	-
Kagami	1	32	-
Menpachi (Bigeye)	3	6.5 to 6.75	-
Paopao	1	21	-
TOTAL FISH TAGGED	700		

Number of Participants

Individual Fishermen	Fishing Clubs	Charter/ Commercial Vessels
62	3	12

Recoveries

The following is just some of the key facts taken from the data we've received so far.

Fish Facts for Recovered Fish

Farthest Distance Traveled:	100 miles - Kona to Kumukahi (Kahala)
Longest Days of Freedom (before recapture):	373 days = 1 yr. & 8 days (Kahala)
Shortest days of freedom:	4 days (Omilu)
Largest Fish Recovered:	43 inches fork length (Kahala)
Smallest Fish Recovered:	11 inches Fork Length (Omilu)

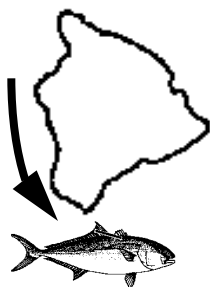
Out of 28 recoveries so far, about 9 or so seem to be showing a distinct pattern of movement around the islands. Based on both short term and long term recoveries, fish tagged on Oahu and the Big Island are beginning to show a counter-clockwise movement around each island.

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Big Island
6 recoveries
showing movement:
6 kahala



Long term recoveries will show both distance and travel direction, but the short term ones (e.g. tagged and recovered within 4 days) also gives us definite movement direction.

It is suspected that the fish may be following the current patterns in the quest for food. The data itself is preliminary, but if this is true, the tagging project may help fishermen to confirm what they have suspected or known all along - that the fish are affected by current patterns in search for food. We will attempt to obtain current patterns for this time period and will see if the fish movements correlate with the current patterns.

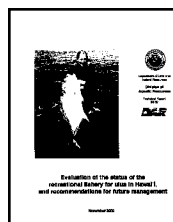
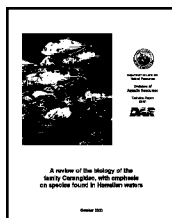
Fish recovered from August till now indicate a counter-clockwise movement pattern. On Oahu, it is known that during ulua season, the ulua travel in the opposite direction (clockwise) e.g. from Makapuu to Bamboo Ridge. When does this happen and why? Do the current patterns change at this time? Hopefully if we can get more fish tagged and recovered between now and the end of ulua season, we may find some answers.

If you have any questions or would like to participate as a volunteer fisherman in DAR's Ulua Tagging Project, please contact Annette Tagawa or Clay Tam on Oahu at (808) 587-0593. You can also email us at:

annette_w_tagawa@exec.state.hi.us
or
clayward_km_tam@exec.state.hi.us

Again, **MAHALO** for all of your tagging and recovery efforts! This project would not be possible without the help from Hawaii's fishermen and women. Keep up the good work, everyone and keep that data coming in!

NEW ULUA REPORTS!

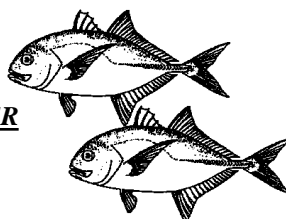


DAR has two new technical reports available entitled:

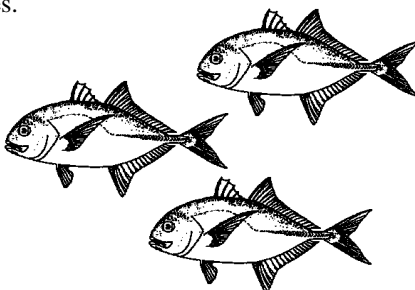
- 1) **A review of the biology of the family Carangidae, with emphasis on species found in Hawaiian waters" and**
- 2) **Evaluation of the status of the recreational fishery for ulua in Hawaii, and recommendations for future management**

These reports are now available at all the DAR offices statewide.

BRAND NEW
ULUA POSTER
AVAILABLE
NOW!!!



For all you ulua and papio fans! DAR has a new poster out entitled "**Hawaii's Jacks and Their Allies**" now available for purchase (\$4 each) at the **DLNR Visitor Center's one-stop shop** located in the DLNR Building at **1151 Punchbowl Street, Room 131**. Business hours are between 8:00 a.m. and 4:00 p.m. Monday thru Friday except holidays. For neighbor islanders, posters are available through our neighbor island DAR offices.



FRESHWATER FISHING

NUUANU CATFISH 2000 WRAP-UP



Maintaining the catfish population at Nuuanu Reservoir for freshwater sport-fishing is also another project that is funded through the Federal Sportfish Restoration Program. Federal funds, along with State matching amounts are used in part to stock and maintain the channel catfish population in Nuuanu Reservoir. The following are some statistics from last year:

Nuuanu Reservoir Catfish Openings

	82nd Open- ing June 2000	83rd Open- ing Aug. 2000	84th Open- ing Nov. 2000
# of anglers	1900	2258	1806
# of fish	1368	1355	772
Ave. length	18.48 inches	18.65 inches	18.62 inches
Ave. weight	3.24 lbs.	3 lbs. 5 oz.	3 lbs. 14 oz.
largest fish	19 lbs 11 oz	16 lbs 12 oz.	16 lbs 14 oz.
caught at	32.5 inches	32 inches	

As noted earlier, the next opening is May 2001. Remember to put in for your lottery date by filling out the application cards tentatively by April 20th. If you missed this deadline, the next opening is for August 2001 and application cards should be available in July.

OFFSHORE FISHERIES

OPAKAPAKA TAGGING UPDATE



The Division conducted tagging studies in an effort to better monitor and understand our valuable bottomfish resources. During 1989 to 1994, approximately 4,000 opakapaka were tagged and released off Oahu and in Maui County. Although there have been no further tag-

ging efforts since 1994, submittal of tags and information by cooperating fishermen and data collection on recoveries have continued. The following chart will give you some of the information collected:

	7/1/97 to 6/30/98	7/1/98 to 6/30/99	7/1/99 to 6/30/00
estimated growth rate	2"/yr	2"/yr	1.4"/yr
longest days of freedom	2,339 days (= 6.4 years)	2,251 days (= 6.2 years)	3,661 days (>10 years)
farthest distance traveled	41 nautical miles	80 nautical miles	50 nautical miles
largest fish caught	26.5" FL at about 11 lbs.	26" FL at about 10 lbs.	30" TL at about 9 lbs.
growth of largest fish caught over time tagged	9.5"	11"	11"

Current Tag Recoveries (fish recovered between 7/1/99 to 6/30/00):

<u>Number Recovered</u>	<u>Tagging Site</u>	<u>Recovery Site</u>
1	Olowalu, Maui	near Hana, Maui
1	North Lanai	North Lanai
1	Ewa, Oahu	West Oahu
1	South Molokai	North Lanai
1	South Molokai	unknown - tag recovered during market processing
2	Southwest Molokai	Southwest Molokai
1	West Molokai	West Molokai

** Some notable movement of tagged Opakapaka*

This behavior of channel crossing was previously unknown to both fishermen and scientists, and has implications for fishery management. The Division will pay \$10 for each tag returned with the following information:

1. WHO (name & address of fisherman)
2. WHEN (date)
3. WHERE (location of capture)
4. DEPTH (fathoms)
5. SIZE (tip of mouth to fork of tail in inches)

FAD PROJECT

Here is the most recent update of missing FADs:

MISSING FADs (as of Dec. 8, 2000):

<u>FAD</u>	<u>Location</u>	<u>Island</u>
MC	Palaoa	Lana'i
FF	Pukaulua Pt.	Maui
N	Cape Halawa (Lamalaoa Head)	Moloka'i
O	Kalaupapa	Moloka'i
DK	Anahola	Kaua'i
BO	Barbers Point	O'ahu
II	Haleiwa	O'ahu

For current locations and/or more information, contact Warren Cortez at 848-2939. Also, if you know of any FADs that broke loose, see any light out or have any other comments, please give Warren a call.

FISH FACTS



Carangoides orthogrammus
(Island Trevally, Yellow-spotted trevally, Papa)

SIZES

Length: specimens can reach lengths of up to 28 inches

Weight: can reach up to 17 pounds

BREEDING

Sexual Maturity: Fish become sexually mature between 12 to 21 inches total length (15.6 inches on average)

Spawning: unknown

LIFESTYLE

Habitat: common in inshore waters and just beyond the outer reefs. Found solitary or in

small groups. They occur in depths from 30 ft to 600 ft.

Diet: Feeds on small benthic crustaceans, worms, and small fishes that live beneath the sand

Life Span: unknown

Distribution: Indopacific and tropical eastern Pacific: western Indian Ocean to Mexico, north to southern Japan and Hawaii, south to Lord Howe and Astral Islands and throughout Micronesia.

RELATED SPECIES

The papa or yellow-spotted trevally is a member of the Jack Fish Family which includes other species such as the white ulua, omilu, kagami ulua, menpachi ulua, butaguchi, omaka, opelu, akule, lae, and rainbow runner to name a few. Most fishes in this group are considered good food fishes supporting valuable commercial and sport fisheries in Hawaii. Juveniles, known collectively as papio, tend to live close to shore for protection, then move toward deeper waters as they get older. In some areas, papa that are over 16 inches in length seem to prefer deeper waters.

Papa are easy to distinguish from other ulua species by the lemon-colored spots located on each side of the body. However, these spots tend to disappear in specimens over 15 inches. Papa are not as common as the omilu or white ulua/papio, but they are caught often enough by most fishermen for them to be familiar with this species.

The following table will give you a general idea on the relationship of length to weight on this species. Presently there is little or no information on its growth rate in relation to age. Please note that these are just ball park figures and meant only to give you a general idea on the relationship of length & weight.

<i>Length, Weight and Age of Papa</i>		
<u>Fork Length (inches)</u>	<u>Weight (pounds)</u>	<u>Age (years)</u>
4	0.04	unknown
8	0.3	"
10	0.6	"
12	1	"
14	1.6	"
16	2.5	"
18	3.5	"
20	5	"
21	6	"
23	8	"
25	10	"
28	13	"
30	16	"
31	19	"

The Department of Land and Natural Resources receives financial support under the Federal Aid in Sport Fish Restoration and other federal programs. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and the laws of the State of Hawaii, the U.S. Department of the Interior and the State of Hawaii prohibit discrimination on the basis of race, color, religion, sex, national origin, age, and disability. If you believe that you have been discriminated against in any program, activity or facility, or if you desire information, please write to: Affirmative Action Officer, Personnel Office, Department of Land and Natural Resources, 1151 Punchbowl Street, Rm. 231, Honolulu, HI 96813, or the U.S. Fish & Wildlife Service, Office for Human Resources, 1849 C Street NW, Room 3058, Washington, D. C. 20240.

